THE

# BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.] THURSDAY, FEBRUARY 8, 1872. [VOL. IX.—No. 6.

## Original Communications.

### SPINDLE-CELLED SARCOMA OF CHOROID. REMOVAL OF EYE. PROGNOSIS.

By HASKET DERBY, M.D., Boston. Examination, illustrated by Drawings, by R. H. FITZ, M.D., Boston. Reported to the Boston Society for Medical Improvement.

IT has been justly remarked that the connection of ophthalmology with general medicine is nowhere more marked than in the department of intra-ocular tumors. And in no part of the body can the initial development of a new growth be studied to greater advantage than in the eye, the slightest interruption in the proper performance of the functions of that important organ being so readily noted. A disease that in another portion of the frame might long lie dormant, without exciting a suspicion of its presence, is here at once forced on the attention. A slight progress, which inspection or palpation might in other regions fail to discover, becomes in the eye patent to the observer and may be demonstrated to the patient. Human life may be prolonged, perhaps saved, by the prompt performance of the operation of enucleation, if done while the optic nerve is yet in a healthy state and the cavity of the orbit uninvaded. It is naturally distressing to the surgeon to be compelled to advise the removal of an eye externally normal, seeing distant objects well, and reading, it may be, the finest print. But the certainty he has acquired of the presence of a disease malignant in its nature, and liable, if neglected, to affect distant portions of the body and to prove ultimately fatal, allows him no alternative, and he cannot but feel a just pride in the progress of a science that has placed in his hands the means of arriving at such a result.

These remarks are suggested by the following case:—

Mr. ——, of Montreal, aged 58, hale and hearty, in the enjoyment of excellent health, consulted me Sept. 26th, 1871. For a few weeks past he had noticed an impairment of vision of the left eye, attracting his notice especially when he looked down. In the street or house, with both eyes open, he seemed to see as well as ever. But, on closing the right eye, he noticed that the lower portion of all objects seemed to be obscured by a veil or shadow. He had carefully studied this phenomenon since first discovering it, and had consulted several ophthalmic surgeons; was still, however, in doubt as to whether the difficulty were progressing or had come to a standstill. But he inclined strongly to the latter opinion.

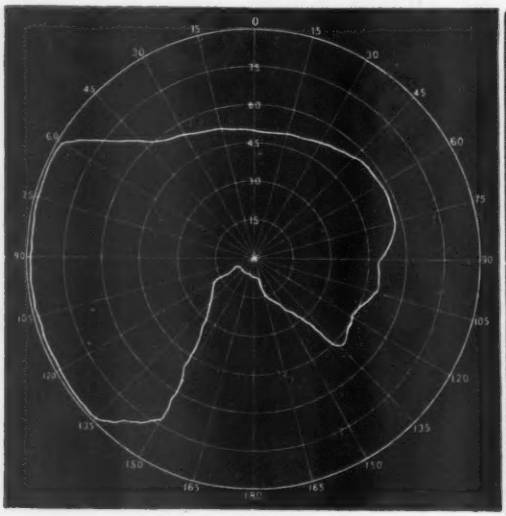
The appearance of the eyes was normal. The vision of the right was excellent ($\frac{20}{20}$) and its interior healthy. The left eye read the same size of type in the same distance. A rough examination showed an important limitation of the lower portion of the visual field. On enlarging the pupil, the ophthalmoscope at once discovered a well-marked rounded tumor, starting from, but apparently not involving, the upper edge of the optic nerve, and extending forwards towards the ora serrata, which, however, it did not reach, as healthy fundus was visible all around it. It projected well forward into the vitreous, and was mostly covered by the retina, the vessels of which were made out with perfect distinctness on its surface. A partial detachment had occurred at its base.

That the tumor was sarcomatous was of course highly probable. The eye had suffered no injury likely to cause a serous or hæmorrhagic retinal separation. A cysticercus presents different symptoms, and is seldom met with in the eye in this country. The age of the patient rendered a glioma improbable. Nothing in the history of the case pointed to a choroidal separation. Clearly, therefore, in enucleation lay the patient's only safety, and yet I was exceedingly loth to advise its instant performance, the vision of this eye being, except for the limitation of the field, as good as that of the other, and the patient himself thinking it very doubtful whether the thing were

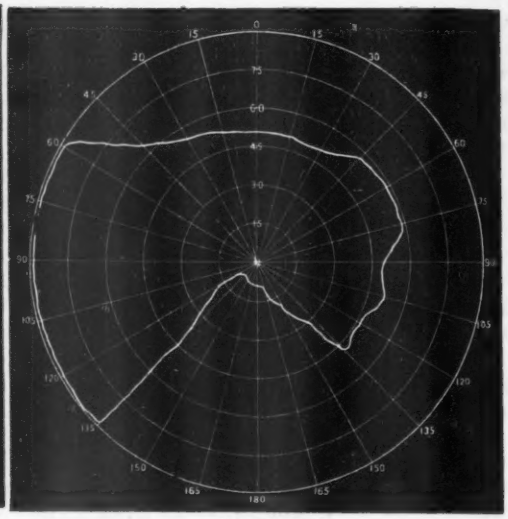
progressing. A brief delay was therefore agreed upon, warning being given that the slightest increase in the size of the tumor would render enucleation imperative.

I made a prolonged ophthalmoscopic examination, impressing the appearance of the tumor on my memory as firmly as possible, and then drew an exact plan of the field of vision by the aid of the perimeter, an invention of Prof. Förster, of Breslau, and the most satisfactory instrument for this purpose that we possess.

A full account of it may be found in the *Compte-rendu* of the Congress of Paris, 1867, p. 125. Its construction is based on the principle that the field of vision may be projected to greater advantage on the inner surface of a hollow sphere than on the usual plane. A broad half-circle of brass is accordingly set upright and made to revolve on an axis passing through its centre, describing thus the surface of half a sphere. Commencing at its centre, the brass arc is graduated in either direction to 90° on its inner surface, and along this surface, a little clip, capable of holding some conspicuous object, such as a bit of colored paper, is made to move by an ingenious mechanism worked from below. It will readily be seen that, by giving the arc different inclinations, the object may be brought into any portion of the visual field, the angle of inclination being read off from a dial-plate behind the upright support. A rest for the patient's chin is provided in front of the instrument, and twelve inches from a little ivory sphere, which serves as a point of fixation. The place on the graduated arc where the moving object passes the limits of the field of vision, and the angle at which the arc is set, being read off, the observation is transferred to its proper place on a printed chart, which is used in connection with the instrument. A series of such observations, made in the various meridians into which the arc may be brought, as indicated on the chart, gives a diagram of the field.



September 27th.



October 18th.

Two such diagrams are given herewith, the one being taken Sept. 27th, the other Oct. 18th. The centre of the figure marks the point of fixation, the irregular line the boundary of the visual field, which is seen to be seriously invaded below. A marked increase in size of this invasion is seen to have occurred in the second figure.

Moreover, the ophthalmoscope showed progress in the tumor. Oct. 18th, the optic nerve surface, previously visible over its whole extent, could no longer be seen. The operation was at once decided upon, and the eye removed the same afternoon, being handed to Dr. Fitz for examination within an hour of its removal.

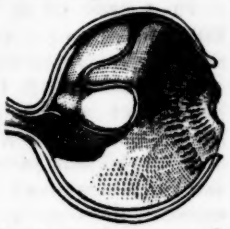
---

NOTES OF EXAMINATION BY DR. FITZ.

The eyeball handed me by Dr. Derby soon after its enucleation, was at once placed in a 2 per cent. solution of chromic acid, the cornea having first been removed. Allowed to remain in this solution till it had become thoroughly hardened, it was then removed to a 50 per cent. solution of alcohol, in which it was permanently preserved.

A transverse section was made through

the globe and optic nerve in such a manner as to permit the relation of the nerve to the tumor to be made out. As can be seen from the accompanying drawing, the tumor occupied nearly one fourth of the cavity of the globe, extending forwards to within a short distance of the ora serrata, backwards nearly to the optic papilla.



The tumor is of an irregularly globular shape, made up, as it were, by the confluence of two rounded nodules. The uppermost portion, as seen in the drawing, represents the plane surface produced by the razor in making the section of the globe and its contents; the greatest thickness of the segment of the tumor cut away was two lines. It can also be seen that the retina is continuous over the greater portion of the tumor; a partial detachment had occurred, however, represented in the figure. The space between the coats of the eye and the tumor was occupied by a firm substance, the coagulated albuminous fluid probably existing during life. The free portion of the tumor bulged towards the axis of the eye, even beyond the same, and must have prevented a view of the optic eminence during ophthalmoscopic examination.

Thin sections were obtained from various portions of the tumor and optic nerve, the selection unfortunately not having been sufficiently varied to enable one to speak from positive information with regard to certain interesting points, especially with reference to the various stages of the alteration in the retina.

Transverse as well as perpendicular sections made through the optic nerve, showed that no visible alteration in its structure had occurred, a fact of great importance with reference to the prognosis in this case; also as to the advisability of an early operation. The structure of the retina immediately surrounding the entrance of the nerve was also found to be in an entirely normal condition.

Just anterior to the optic papilla, perhaps a couple of lines, at the very edge of the tumor, a number of sections were obtained which were of great interest as allowing one to determine the histological situation of the new growth.

The retina could be seen to ascend the surface of the tumor, the pigment epithelial layer intervening between the two. The ordinary so-called granulation tissue was not to be seen at this point. Groups of round cells varying in size, but with large distinct nuclei, round and oval, containing nucleoli, were arranged in an alveolar form; each group of cells, comprising from four to twelve individuals, was surrounded by a delicate fibrous border, and occasionally single large groups were separated into smaller ones by delicate fibrous septa. At rare intervals a small bundle of spindle-shaped cells, with long oval nuclei, could be seen to run for a short distance across the field, so that the possibility, even probability, was presented that the alveolar arrangement of the cells might be due to transverse and oblique sections of bundles of fusiform cells.

At this angle the choroidal bloodvessels, more properly bloodvessels of the tumor, were very large, bounded by a relatively thin wall, and were more numerous than elsewhere in the new growth. When a small-celled accumulation did take place in the choroid, it assumed the more or less alveolar form.

The structure of the tumor in general is represented in the wood-cut. A mass of large spindle cells, packed closely together, containing large, distinct, round and oval nuclei, as a rule with but one, though often with two, round, homogeneous, glistening, nucleoli. The cells are finely granular, the nuclei likewise. At no part of the tumor, so far as examined, were cells found which contained either fat or pigment.

Arranged in bundles of varying thickness, one often met with transverse sections, whence the groups of apparently round cells represented in the cut. The cross-section of a bloodvessel containing blood-corpuscles is also seen; in connection with the wall of the vessel are two small bands of fibrous tissue forming trabeculæ, supporting-beams for the cellular structure.

These trabeculæ were scattered irregularly through the tumor, often running to its free surface, at which point they spread fan-shaped beneath the vitreous body. The proper intercellular substance was exceedingly scanty, formed of delicate fibres and finely granular material.

Often, in fact as a rule, in the hardened specimen, except at the border, the ap-

pearance was presented as if only large, sharply-defined nuclei existed in a granular and fibrillary basis-substance. From the examination of fresh similar specimens, it is probable that this appearance is due to the method employed in the examination of the tumor, the cell-protoplasm being exceedingly destructible.

Towards the sclerotic more of the fibrous tissue was to be found in the tumor, the bundles of cells were smaller, the individual cells also not so large. At this part, the fibres of the chorio-capillaris were apparently split apart by the advancing growth, and were seen to project upwards into the tumor, often containing small accumulations of pigment granules. At the very edge of the tumor in this region, at a point where it was not to be stated definitely, whether one had to do with choroid or sclerotic, though probably with the former, lines of small, round cells were found to lie between delicate, more or less parallel, fibres. In a general way it might be asserted that an advance of the new-growth into the proper tissue of the sclerotic had not taken place.

As a whole, the tumor was quite vascular, the bloodvessels small, but numerous, the walls exceedingly thin.

The tumor having been sent away before the sections were thoroughly examined, those cuts which represent the retina in connection, show it to be so thoroughly changed that no elements characteristic of its structure could be found. The sections obtained were from that portion of the tumor, as seen in the first wood-cut, from which the segment had been cut away.

At the very surface of the tumor was seen a limiting membrane, beneath which was a limited layer of cells, some six in depth. These cells were closely packed together, contained round, single-nuclei with nucleoli. The upper layers were apparently round, with delicate intercellular fibres; the lowest layer, that immediately bordering upon the spindle-cells of the tumor, was made up of anastomosing stellate cells, immediately surrounded by a considerable amount of hyaline intercellular substance, in which were occasional minute granules and very delicate fibrils. So far as this part alone of the tumor is concerned, a more myxomatous character was presented. Occasionally, also, in the same vicinity, resemblances to the structures of the glioma were seen.

From the fact, however, that these deviations from the character of the general growth were limited to the position of the retina, the preëxisting anatomical peculiarities of the same were probably the direct cause of the varied pictures.

---

In a case of sarcoma the prognosis is naturally grave. The disease is, of course, essentially malignant, yet if any exception exists to this as to other rules, the present should be an instance of one. Spindle-celled sarcoma progresses very slowly. In the case of our patient, the growth was of moderate size and strictly confined to the eyeball, the optic nerve being healthy, and the orbital cavity free. General infection through the lymphatics or circulation is ordinarily preceded by an extension of the disease in the immediate vicinity, which had not here had time to take place.

Prof. Weber is referred to by Knapp* as reporting two cases of choroidal melanosis, on which he had operated, the one thirteen, the other twenty years before. Both patients were living. In a case of Prof. Dor's, reported by the same author, the disease, a spindle-celled sarcoma, made its appearance in 1858, and was operated on in 1860, when the eye was in a state of glaucomatous inflammation, a period considered extremely unfavorable. No recurrence had taken place nine years later.

In the present case, the operation should have been performed as soon as the tumor was diagnosticated, the delay having been a mistaken kindness to the patient. It was, however, so short and the progress of the disease so inconsiderable that it is unlikely to have been a source of injury.

The drawings of the gross and microscopic appearances were made by Dr. Fitz on the block, thereby materially lightening the labor of the engraver. They speak for themselves. H. D.

---

## CASE OF LEAD POISONING FOLLOWING THE USE OF A HAIR PREPARATION.

By J. M. Crocker, M.D., Provincetown.

The following case of lead palsy, from using a "Hair Preparation," may not be uninteresting. R. W., aged 55, laborer, was attacked with what appeared to be muscular rheumatism, affecting mainly the deltoid and other muscles of shoulders, last February. When first visited, he was suffering from pains which he had felt more or less severely for a month or two. Both arms were in this manner crippled. Ordered cotton batting to affected parts, lemon-

* Die intraocularen Geschwulste, p. 209.

juice and opiates internally. Made quite a rapid recovery, but when seen in March following, he was suffering from an almost complete paralysis of extensor muscles of fingers and hands, with dropping of wrists. He could readily and forcibly grasp, but found difficulty in letting go. No lead lines about gums could be seen. Said he had had several attacks of colic within a few years. The water used for drinking purposes was obtained from a brick well, and stood in a wooden bucket. Ordinary cooking utensils were used in his family. Subsequently, upon inquiry, I discovered that for fifteen years had used a "hair renewer," made by himself of three teaspoonfuls lac sulphur and two teaspoonfuls sugar of lead to a pint of water. With this he had drenched his hair and scalp as often as once a week. Under use of iodide of potassium and galvanism has made a good recovery, the hair-dressing having, of course, been discontinued. The urine was not examined after treatment began. No colic since use of sugar of lead was stopped.

# Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, M.D., SECRETARY.

Nov. 27th, 1871.—*Bright's Disease.*—DR. FIFIELD reported the case.

D. F., aged 58, Scotchman. Strong, tough, and always healthy. Forgeman by occupation. First applied for advice Oct. 26th, complaining of violent pain in right hypochondrium, just beneath the false ribs. This pain was accompanied with vomitings of a greenish liquid, and the case was considered one of bilious colic. A pill consisting of a grain of opium was given; abstinence from all food and drink advised till the nausea and vomiting should cease.

27th.—Much better.

28th.—Has taken a dose of castor oil, and the bowels have been freely moved.

30th.—Has returned to his work at the forge.

Nov. 6th.—Again complained of severe pain in left hypochondrium, beneath the ribs, exactly in the same place as felt before in the right side. The vomitings consisted of the same liquid as before, the color a peculiar, light green. Pulse and tongue normal. The most careful examination of the parts where the pain is complained of, fails to reveal anything abnormal. No pain is caused by deep pressure over the situation of the kidney. Fine crepitation is heard at the base of left lung, which disappears after a few deep inspirations. No change in complexion of any part of the body. The patient declared that he passed no larger quantity of urine than he had ever done, and that he never rose in the night to urinate; that he had never been subject to headache or vomiting, and that his sight was perfectly clear. Same treatment to be pursued as before. Asked that a portion of the urine might be saved.

7th.—Vomiting still present. Not so much pain. Impulse of the heart heavy, and widely extended. No murmur. Crepitation at base of the lung as before. Pulse 120. Temperature normal. This seemed so extraordinary that the accuracy of the instrument was doubted, but some experiments showed it to be correct. No urine had been saved. No medicine to be given. A few grains of calomel were placed on the tongue to check vomiting and perhaps move the bowels. Patient had not slept well.

8th.—Vomiting has ceased. No pain. No motion of bowels. Is very drowsy; can be roused and made to sit up and talk, but if allowed to lie down is instantly asleep. This condition is not the result of any opiate, as the patient has had none. Same crepitus at left base disappearing as before. No evidence of any effusion into any cavity of the body. No œdema of the feet, hands or face. Patient had ruined the specimen of urine saved by spitting into it. On looking at the patient's mouth, he was found to be salivated from the calomel given yesterday. The suspicion that I had a case of Bright's disease to deal with became almost a certainty to me, for I have never noticed such speedy salivation when this disease has not existed. Strong representations were made of the necessity of saving a specimen of the urine, and some was promised to be sent to me during the day. Three compound cathartic pills were ordered, to be followed by fluid extract of senna, if no motion was procured within five hours.

At 9 o'clock, the evening of the same day, I was sent for on account of the continued drowsy state of the patient, although he had been restless at times during the day. The bowels had been well moved. A specimen of the urine was now given me. Specific gravity 1015—one observer said 1012. Albumen present both by heat and acid. Rather small in quantity, but gives

a fair deposit in the tube. Microscope shows one cast in the field, granular at one end. No blood corpuscles. Prognosis unfavorable.

9th.—Patient feels quite well. Pulse 90. Temperature normal. No pain. No vomiting. Specific gravity 1015. Albumen abundant. Three casts in the field, none so perfect as that of yesterday. Patient has been able to make his will.

10th.—Still feels well.

11th.—Very small amount of albumen. Not enough to give a deposit.

13th.—Very restless. Albumen abundant. Urine same. I am besought to give an opiate, but give ℥ss. bromide of potass. instead. Sent for at night to give an opiate, as the bromide had effected nothing. Refused to give any. Urine the same. Patient surrounded with friends, and talks with them in a manner apparently clear. His wife thinks that he was once slightly convulsed to-day.

18th.—Slept all day, till 4 o'clock, P.M., when he woke and conversed. Fell asleep again about 6 o'clock, which sleep grew more and more heavy until, at 8 o'clock, he stopped breathing without a struggle.

His shopmates now say that during the summer he had frequent headaches with vomiting.

Dr. Stedman tells me he had consulted him for these headaches and vomitings.

*Post-mortem* examination shows the lungs curiously dark in spots, evidently from the deposit of carbonaceous matter inhaled in working at the forge. Heart much hypertrophied. No disease of valves. Supra-renal capsules had been the seat of a very considerable effusion of blood. On the left, some of the blood had escaped and passed downwards beneath the fascia, covering the psoas and iliacus muscles. Kidneys normal in size, dark red in color.

*Autopsy* by Dr. Fitz.

After a careful examination of the specimen, it seems that the enlargement of the supra-renal capsules was due to a hæmorrhage in the central soft pulp. The cortical substance presented a relatively normal appearance. The hæmorrhage must have occurred at least weeks ago, as the coagulum had softened centrally; and as a result we had reddish-brown fluid, of a creamy consistency, bearing a strong resemblance to the "coffee-grounds" vomit.

Through the hæmorrhage an enlargement of the capsules had taken place, their size to be compared with that of a small lemon.

There was no increase of fibrous tissue between capsule and kidney, showing that no chronic irritative process had occurred in the former. I was unable to find the arteries leading to the organ. A vein leading from the same contained an ante-mortem coagulum. It seems very probable that rupture of one of the capsules had occurred, whence the effused blood found in the fascia lying on the curve of the diaphragm and the psoas and iliacus muscles.

An examination of the kidneys showed that without any apparent diminution in size, they were more firm than is usually the case. The capsule was detached with difficulty, and a thin layer of renal parenchyma was pulled off with the capsule.

The surface of the kidney thus bared was roughened without presenting marked granulations, so called. On each kidney were found two or three patches of considerable size, projecting above the surface of the kidney a line or two; the border was more or less serpentine, and the renal structures here more flabby and pulpy than elsewhere. The color, also, was of a grayish hue, whereas elsewhere it was of a dark red.

After cutting through the kidney—its substance was abnormally resistant—the cortical substance in general was diminished in amount, and no sharp distinction between straight and convoluted tubules could be made out. The malpighian corpuscles could not be recognized. In the swollen portion previously referred to, the cortical substance was increased in volume, pale and opaque; malpighian corpuscles occasionally to be made out with the naked eye. The pyramids presented nothing unusual. On microscopical examination of the atrophied portions of the kidney, occasional fatty tubuli were found, and a tolerably constant increase in the amount of interstitial tissue, most marked in the immediate vicinity of the malpighian corpuscles. Many of these were very much smaller than usual, and more homogeneous in appearance, little or no evidence existing of a capillary plexus within the thickened, condensed capsule. In the swollen portion, there was no marked alteration of the interstitial structure. The convoluted tubules, however, were enlarged in volume, their epithelium being in a granular condition.

Another interesting feature in connection with the kidneys, perhaps, also, in connection with the source of hæmorrhage in the capsules, was the presence of a small aneurism of the renal artery. An elongated, saccular aneurism, an inch in length and a

half inch in diameter, filled with an old, firm, partially decolorized coagulum, a portion of which had become organized and formed part of the walls of the vessel.

In answer to a question, Dr. FIFIELD stated that there were no symptoms that might have been attributed to disease of the supra-renal capsules.

Dr. WILLIAMS spoke of a patient who had consulted him for dimness of vision. The ophthalmoscope showed structural changes in the eye, such as are found in Bright's disease. The patient was advised to work less and to rest. He had never considered himself a sick man, although he had had some headache and nausea. He was seen again, and reported himself as better, but he did not look so, and some gastric symptoms had appeared. He went into the country, and died in a fortnight.

Dr. WADSWORTH said, with regard to the frequency of changes in the eye in Bright's disease, that he had for some time past examined every case that had been admitted into the City Hospital, and had found that in about 25 per cent. trouble in the eye existed.

Dr. FIFIELD said that the strange part of these cases was, the great and sudden variation in the state of vision. In some cases vision will be very much affected for a few days, and then will become almost normal.

Dr. WADSWORTH spoke of a case where, judging from the history, there must have been some changes in the retina, and yet it had returned to an almost normal condition. The changes found in these cases are, an hypertrophy of the connective tissue and a sclerosis of the nerve-fibre, and also some serous effusion.

DR. WILLIAMS thought that any improvement of vision must be due to the absorption of the effusions, as of course the retinal tissue or nerve fibre can never be restored to its normal condition after structural changes have taken place.

NOV. 27th.—*Pain in the Anus.*—Dr. WELLINGTON reported the case.

In the year 1839, a gentleman, then 25 years old, whose general health was excellent, was waked one night by an intense pain in the anus. This pain he described as excruciating almost beyond endurance. Unable to lie in bed, he got up and went into an adjoining room. Soon the pain seemed to dart from the anus to the head. This was followed by a peculiar sensation in the head as though the brain was whirling. Unconsciousness followed, and the next thing our patient remembers was that he was lying on the floor, with a dull pain in the head, but entirely free from the pain at the anus. How long he had lain unconscious he had no means of knowing. He returned to bed, went to sleep, and awoke in the morning feeling well.

No disease could be detected at the anus, or in the lower part of the rectum. There were no hæmorrhoids. Neither fissure, ulcer, nor inflammation of any sort existed at that spot. No pain attended the act of defecation. The bowels were not, and had not been, costive. Nothing could be found which would explain this severe attack of pain.

Subsequently, for many years, the patient's health continuing good, he had occasional attacks of the same sort of pain, but less severe than that just described. They always came on in the night, lasted from ten to fifteen minutes, and then gradually subsided, leaving no evil consequences. His habit was to lie as quietly as he could, and let them take their course.

In the year 1866, the gentleman then being 52 years old, an attack occurred similar to the one twenty-seven years before. So great was the agony that he got out of bed and began to walk about the room. As on the former occasion, the pain darted from the anus to the head, the brain seemed to whirl, and he became unconscious. His wife was waked by the noise of his movements, and found her husband sitting in a chair, insensible, his face and arms bathed with a cold perspiration, and breathing stertorously. Consciousness soon returned, and vomiting followed. The pain at the anus had disappeared. No bad symptoms supervened.

As before, no disease of any kind could be discovered about the anus, and the general health was good.

During the last five years, there have been occasional attacks of the pain, sometimes severe, at other times slight, lasting from ten to fifteen minutes, and always occurring in the night. During the last year, they have diminished in frequency.

I do not know what name to give to the disease I have been describing, unless it be that of "neuralgia of the anus." Such a disease is occasionally mentioned by surgical writers, but in a very general way. Ashton speaks of it as having a real existence, and as occurring in anæmic individuals, in females whose systems have been depressed by menorrhagia, or frequent childbearing, particularly if the labors have been attended by floodings and the like. Dr. Van Buren, of New York, thinks that

in most cases of so-called neuralgia of the anus a local lesion may be detected, if careful examination be made; but he admits that *possibly* we may "encounter an example of pure nervous pain for which there is no cause." Druitt dismisses it with the remark that "it is a common disorder of children and of gouty adults, and in either case is best treated by purgatives." Erichsen, Cooper and Brodie say nothing about it. In the present case, the patient was neither anæmic nor debilitated. He was not a child or a gouty adult. On the contrary, with a single exception, he was a man in good health.

The cerebral complication was the most marked feature. For the time, this appeared like sudden apoplexy. It occurred only when the patient, in consequence of the severity of the pain, had left the bed and was walking about the room, and it subsided as suddenly as it came.

The case received no treatment. The attacks always occurred in the night, and were so sudden and passed off so soon that there was no time for local applications. In the intervals the gentleman was perfectly well, and he could not be made to see the propriety or necessity of taking medicines to "improve his general health."

# Foreign Correspondence.

## DIAGNOSIS OF SYPHILIS BY THE MICROSCOPIC EXAMINATION OF THE BLOOD.

VIENNA, January 12, 1872.

MESSRS. EDITORS,—I have just returned from a meeting of the "Gesellschaft der Aerzte," at which was announced a discovery of the most stupendous importance. I am eager to be the first to herald to the new world, through your pages, the greatest success—I may venture to say—as yet achieved by the microscope, to wit, the certain diagnosis of syphilis. I will give briefly, from memory, the course of procedure which led to this grand result, having first recorded the name of the propounder of the new theory as Dr. Lostorfer. Wishing to make a series of examinations of blood from syphilitic patients, Dr. L. applied to Prof. Zeissl, in August last, who at once placed his wards at the service of the investigator. The manner of conducting the researches consisted in taking a drop of blood, placing it immediately between a slide and covering glass, then setting the specimen under cover. A large number of slides were thus prepared, and daily examined microscopically with a No. 10 immersion lens, Hartnack. The first two days nothing abnormal presented itself; but, on the third, minute shining bodies were discerned, which grew from day to day, until they attained the size of red blood-corpuscles. The shape was, in most instances, round, but modifications of that form were here and there noticed; they were all, however, provided with tapering processes or "sprouts." The number of these corpuscles to be seen at one time within the field of the microscope was variable, amounting in only one specimen to fifty. A month later these objects were still visible. A solution of sugar, as well as several other solutions, caused them to shrivel up, become, as it were, folded upon themselves, lose their shining aspect, and cease to grow. Cold was also found to affect their development, inasmuch as a temperature below 10° Reaumur (54° Fahr.) put a stop to all growth.

To prove the connection between these bodies and syphilis, very many experiments were made with healthy and diseased blood, and the diagnosis confirmed beyond the possibility of doubt.

Blood was then daily examined while the patients were undergoing treatment with mercury (einreibungen), and, after a certain time (in one case twenty-five days), during which the number of corpuscles was steadily decreasing, they had wholly vanished from the field. After these experiments, Dr. Lostorfer submitted himself to Prof. Stricker and later to Prof. Hebra to have his power of diagnosticating syphilis, by the microscopic appearances of the blood, put to the test. On various occasions he received from them numbered slides with blood of syphilitic and non-syphilitic individuals. To their astonishment, he unerringly selected from the preparations those where the blood was tainted with syphilis, with the exception that on certain slides the blood was pronounced to be in a condition allowing of no conclusion being arrived at.

The discoverer gives the name of syphilitic corpuscles to these bodies, which, he said, must originate in one of two ways—either from germs always present in the blood, but stimulated to growth by the syphilitic virus alone, or from such introduced bodily into the blood at the time of infection.

In conclusion, he read the records of a number of cases with his microscopic observations of the blood from day to day.

As Dr. Lostorfer ceased speaking, a burst of genuine enthusiasm escaped from the assembled physicians, while Prof. Škoda rose to greet the hero of the evening, as the proclaimer of what was destined to prove one of the most important discoveries of the age. He regretted that it was not customary in Austria to give medals or other rewards of merit in such cases, stating that, had this statement been made in Paris, he would have been crowned, as he deserved.

Prof. Stricker detailed the precautions taken to avoid error or deception in each of the trials to which Dr. L. was subjected. The latter's selection of diseased blood was always correct, and decided, except in the few ruined specimens. To ensure the purity of the healthy blood, he had taken his own and that of his servant. After a while, Dr. L. distinguished between these two, inasmuch as the professor's was thicker and "dirtier."

Prof. Hebra confirmed all that had gone before, and said he had been so much struck with the discovery, that Prof. Stricker's blood "contained more filth (schweinerei) than that of any other living man," that he had instituted researches for similar peculiarities among his patients, but, thus far, without result. No words are needed to show the immense field for research, thus suddenly thrown open to investigators, nor can the practical results likely to proceed from this study be overestimated. Microscopes all over the world will now be turned toward these new constellations, and their every freak recorded.

Theories of unity and duality will soon cease to vex the earnest student and practitioner, and half the skill and learning of dermatologists is made of no value by this simple and certain indication of the presence of the syphilitic virus. The testimony of two such renowned and incredulous men as Professors Stricker and Hebra is a convincing proof that these corpuscles are not bubbles to be pricked by the next impertinent microscopist. I trust I have not omitted nor misstated any of the main points of Dr. Lostorfer's paper, but if so, will send you in expiation of my offence a copy of his article, as soon as printed.

I am yours, &c.,

JAMES R. CHADWICK, M.D.

---

CATS AND DOGS are proved to be insusceptible to the vaccine disease.



# Selected Papers.

## HÆMOPTYSIS IN CONSUMPTIVE PATIENTS.

By D. FRANCIS CONDIE, M.D., of Philadelphia.

HÆMOPTYSIS, in the description of tubercular consumption given in the books, is very generally enumerated as among the most common of its prodromes, and as a predominant symptom during some period of its course. This, so far as my own experience goes, is an error, and one very liable to mislead those who have not studied with close attention the disease at the bedside of the sick. It is true that the deposition of tubercular matter in the lungs may be preceded and accompanied by hæmoptysis, but by no means so generally as to warrant its being ranked as among the premonitory, much less as a diagnostic symptom of tubercular phthisis.

Of three hundred and sixty-nine cases of tubercular consumption, very full notes of which I have kept, hæmoptysis occurred in eighty-seven (that is, in about 24 per cent.). In two hundred and eighty-two of the cases it neither preceded nor was present throughout the attack. The absence, therefore, of hæmoptysis, is not to be received in any case as an indication of the absence of pulmonary tubercles, nor can the occurrence of pulmonary hæmorrhage be received as an indication of a future or present tuberculosis of the lungs.

In eighty-seven cases of consumption in which pulmonary hæmorrhage occurred under my observation, the hæmorrhage preceded in forty the first symptom of the deposit of tubercular matter some considerable time—say two, three, five, six, or even twelve months; in some cases, however, it preceded the indications of tuberculosis only a few days, in others, again, it occurred at the very onset, so far as I was enabled to judge, of the tubercular deposit. In twenty-nine cases, the hæmorrhage occurred at different periods during the progress of the disease, and in its latter stage in eighteen cases in which the presence of cavities in the lungs was detected upon auscultation. * * * * *

As to the cause of the hæmoptysis which is met with in those who are laboring under tubercular consumption, or who are predisposed to an attack of the disease, it varies, according to my observations, in different cases, and certainly at different stages of the disease. In some cases it is evidently the result of a state of hyperæmia

or congestion of some portion, of more or less extent, of one lung or both, the overloaded vessels relieving themselves by a percolation of blood or by a rupture of the coats of one or two of them. In other cases, the hæmorrhage is caused by the opening, from ulceration in its neighborhood, of an artery; in others, again, we have traced it to a slow but constant exudation of blood from the mucous coat of the more minute ramifications of the bronchial tubes. In the latter case, the matter expectorated consists of a mucoid fluid intimately mixed with blood, giving to the sputa a color like that of the rust of iron—sometimes the sputa have very much the color and consistence of currant-jelly. So far as I could judge, hæmoptysis from the first-named cause was most generally found to precede the deposition of tubercular matter or to occur in the early stage of tuberculization, or when the circulation in some part of the lungs is impeded by a large cluster of unsoftened tubercle. Hæmorrhage from ulceration may occur at any time in the course of the disease, while the bronchial hæmorrhage is most generally confined to cases of tubercular bronchitis or pneumonia, though it may be met with in the latter stage of uncomplicated cases of pulmonary phthisis.

Occasionally, the hæmorrhage which precedes the attack of pulmonary consumption, or which occurs towards its close, is quite profuse, and has a tendency to recur again and again, at shorter or longer intervals. During the course of the tubercular attack, the hæmorrhage met with is seldom to any great extent, and when once it ceases, seldom returns.

What influence, for good or for bad, the occurrence of pulmonary hæmorrhage in cases of consumption has on the latter, the data in my possession are not sufficient to allow me positively to determine. Judging, however, from what facts I have been enabled to collect, I should infer that the influence exercised by the hæmorrhage, one way or the other, upon the character or duration of the disease, was by no means very decided. It may be, that a moderate hæmorrhage occurring just preceding the development of tubercles may have a tendency rather to retard than to promote such development. On the contrary, however, when the discharge of blood is considerable and repeated, an injurious effect may be anticipated. When hæmorrhage occurs during the course of tubercular phthisis, even if only to a moderate extent, it cannot fail, indirectly, to have an injurious effect, by standing in the way of the patient taking that amount of active out-door exercise which is so important an item in the management of all cases of tubercular deposit, and at the period when most benefit is to be derived from such exercise. Profuse hæmorrhage from the lungs occurring in the latter stages of tubercular consumption—which fortunately is rarely the case—could not fail by its debilitating effect to accelerate a fatal result.—*American Jour. of the Medical Sciences.*

Medical and Surgical Journal.

Boston: Thursday, February 8, 1872.

## THE OFFICE OF CORONER.

We are indebted to a friend for a copy of the petition presented to the Legislature a few days ago, which has in view the reorganization of the laws relating to the office of coroner, and the appointment of thoroughly reliable men. The views presented in the petition are so sound, and express so fully the feelings of medical men, that we copy the petition in full.

At various times during the past few weeks the attention of the public has been called to the statement that a certain unnamed but well-known coroner of this city had been guilty of gross malfeasance of office, and had fraudulently obtained money from the public treasury as compensation for services never performed.

These very serious, yet vague and indefinite charges, though directed against an individual, coupled with the fact that fraud could be so easily perpetrated, have aroused the suspicion of the community against all coroners, and have impaired the public confidence in the integrity and ability of a respectable class of our citizens, which includes several of the best known and most respected physicians of our city. The nature of these accusations subject all coroners to public odium, and thus *many* are obliged to suffer reproach by reason of the misdeeds of a few.

Actuated by a desire to discover the guilty parties who have thus abused their official privileges, and to place the responsibility where it properly belongs, as well as to remove the stigma which attaches to the name of coroner, your petitioners request

your honorable Committee to institute a thorough, searching and impartial investigation of all the circumstances attending the alleged fraud. To aid the Committee in their investigation, we submit the evidence of fraud in fifteen cases, all having died from natural causes, certificates of which have been filed in the City Registrar's office, and on which it is claimed "*post-mortem* views" have been held.

Your petitioners are encouraged to believe that should this subject receive the careful consideration which its importance demands, the Committee will recommend the adoption of such measures as will not only punish the guilty and free the service of disreputable officials, but also tend to restore the public confidence, and surround the office with such laws and restrictions as will prevent a recurrence of the crime.

This occasion presents a favorable opportunity for a thorough revision of the statutes governing the appointment of coroners, and regulating their duties. But slight investigation will be requisite to convince the honorable Committee of the apparent necessity of an entire and radical reform in this direction.

We would respectfully submit for the consideration of the Committee a few suggestions which influence the petitioners in desiring a modification of the statutes.

In the first place, your petitioners would recommend a reduction in the number of coroners for the city of Boston. Our experience and the history of other cities warrants the assertion that the present number is far in excess of the number actually required for the successful discharge of the duties of the office. Physicians and officials from other cities of our own and foreign countries, have remarked with surprise the unusual number of coroners in this city, exceeding that of any city in the world. London, with its immense population, has but four coroners; New York has eight, Philadelphia, New Orleans and Chicago *two* each; San Francisco, Baltimore, Washington, D. C., and Cincinnati but *one* each, while Boston has *twenty-five*—or *three more* than all these great cities combined. As a natural result of this excessive number, but comparatively few have any extensive experience in the business, which would tend to make them more effective as officials charged with great responsibilities. For a period of two years ending Dec. 15, 1871, the whole number of inquests held in Boston was 187; the number of "*post-mortem*" views during the same time was 702, and the total amount of fees disbursed for the entire service was $3,424.00.

Several of the coroners have held no inquests whatever, and by far the greater portion of the labor has been performed by a quarter part of the entire number.

The rapid increase of our population, and the proportionate increase of accidental, mysterious and sudden deaths, do not demand a corresponding increase in the number of coroners, but the adoption of a system whereby the responsible duties of the office may be more satisfactorily performed, and the interests of the public more generally subserved.

We would also suggest the expediency of establishing a department or bureau where shall be registered all facts and records pertaining to inquests and *post-mortem* views, these records to be at all times accessible to the public.

Under the present system, if such it can be termed, no records of *post-mortem* views are made by the coroner, or demanded by the law, the only evidence of such views being the coroner's bill for services on file in the city treasurer's office. The absence of any system of registration, by means of which the friends of "unknown deceased" can ascertain their fate, is an evil which should be remedied. Frequently, the only clue of the fate of a relative or friend is a brief notice published in the daily papers, of which no record is preserved.

Another recommendation which your petitioners would especially urge is an increase in the amount of bonds required of a coroner. The present bonds of five hundred dollars seem insignificant when compared with the opportunities presented of obtaining money unlawfully. We would earnestly recommend that the amount be increased to five thousand dollars at least. Occasionally, the coroner is compelled by circumstances to become custodian of considerable sums of money found on the persons of deceased upon whom inquests are held, and a more strict accountability should be required of officials.

Your petitioners indulge the hope that the present favorable opportunity for modifying the statutes, establishing proper safeguards, and advancing the public interest, will not pass unimproved. We submit these considerations for the mature deliberation of the committee, relying upon your ability to recommend and urge the adoption of such measures as will tend to secure a more practical and efficient performance of responsible professional duty.

THIRD ANNUAL REPORT OF THE CHILDREN'S HOSPITAL. — The report of the Children's Hospital, which has just been issued, assures us that the institution has done a good work in the past year; that it has been steadily gaining the interest and confidence of the community and of medical men, and may now be regarded as an established public charity.

During the past year the number of children received as inmates has been ninety-seven; making the total, since the opening of the hospital, one hundred and ninety-six.

The managers speak of the condition of poverty and degradation which is the birthright of the poorer classes in our community, and of the poor hygienic circumstances of those who are naturally to become the inmates of hospitals. It is known to all medical men that want of pure air and uncleanliness are fruitful sources of disease. The condition of ignorance which marks the lower classes of the community is constantly acting to debase the tone of society; it allows only the lowest wages for labor, and it leads to the squandering in improvidence for successive generations of that which should support in comfort. Agencies such as these are constantly at work to lower the vital force of the poorer classes of society, and to render the children an easy prey to the attacks of disease. The aim of all judicious medical treatment is directed not alone to relieve immediate disease, but by a thorough change of life and circumstances, by supplying a rational course of diet and regimen, by substituting for ignorance and thoughtlessness, and the thousand indiscretions which they suggest, judicious and gentle nursing, warmth, nourishment, light and air—to lay the best foundation, in fact, for relief from disease, either acute or chronic. Such facts as these are constantly seen by the visitors of the poor, convincing them that depressing agencies are continually working in the homes of poverty; that they are the most natural and most prolific causes of disease; and that, when disease comes, they still constitute the chief hindrance in the way of recovery. The inmates of the Children's Hospital have, almost invariably, been subjected to influences such as these, and the diseases under which they labor are the natural sequence of such.

In offering to the poor, therefore, an institution where their sick children may be judiciously and kindly cared for, the managers feel that a good has been done which should merit the confidence of the public, and that the benevolence of the community will not fail to make it permanent.

The report of the medical staff of the hospital and the statistical table of the medical and surgical cases treated, is interesting to members of the profession.

---

DR. CHADWICK'S LETTER.—The letter written from Vienna by Dr. Chadwick will be read with interest by members of the profession, treating as it does of a scientific matter of considerable interest, and without doubt many important points in the etiology of syphilis and also of gonorrhœa will be worked up by the German scientists. For the honor of our own country, however, and in order to show what has been done in the same direction on this side the ocean, we must refer our readers to the investigations of Dr. Salisbury, of Cleveland, Ohio, especially to his article describing "Two new Algoid Vegetations, one of which appears to be the Specific Cause of Syphilis, and the other of Gonorrhœa," in the *American Journal of the Medical Sciences* for January, 1868, and to other articles by the same author.

---

AMERICAN MEDICAL ASSOCIATION.—The Twenty-third Annual Session of the Association will be held in Philadelphia, Pa., May 7, 1872, at 11, A.M. Reports will be made by committees on subjects specially assigned, and other business will be transacted as in previous sessions. Physicians desiring to present papers before the Association should observe the following rule:

"Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the Secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the Secretary to whom such papers are sent to examine them with care, and, with the advice of the chairman of his section, to determine the

time and order of their presentation, and give due notice of the same. * * * "

The following are the Secretaries of sections:—*Chemistry and Materia Medica*, Ephraim Cutter, Boston, Mass. *Practice of Medicine and Obstetrics*, Benj. F. Dawson, New York, N. Y. *Surgery and Anatomy*, W. F. Peck, Davenport, Iowa. *Medical Jurisprudence, Hygiene, and Physiology*, E. L. Howard, Baltimore, Md. *Psychology*, John Curwen, Harrisburg, Pa. Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary. Other information can be obtained of the Permanent Secretary, Dr. W. B. Atkinson, 1400 Pine Street, Philadelphia.

---

Photographic Review of Medicine and Surgery.*—We have already spoken in terms of commendation of this beautiful and interesting addition to our professional literature. By exchange we have been furnished with the numbers of this periodical for October and December, and these and future numbers can be seen by physicians at our office. They certainly furnish the most beautiful representations of disease which have been brought to our notice. The Editors not only solicit subscriptions, but offer to publish representations of disease to physicians and surgeons who may furnish them with negatives of the cases.

The subjects represented in the numbers now on hand are Pseudo-hypertrophic Muscular Paralysis; Deformity of the Leg; Epithelioma of the Face; Aneurism of the Aorta; Condylomata of the Prepuce; Fatty Tumor of the Neck; Venous Tumor of the Lip; and a case of Extirpation of the Thyroid Gland.

---

Case of Dislocation of the Left Hip; Reduction by Bigelow's Method.—At the University College Hospital, in the service of Mr. Erichsen.

G. B., a stout, muscular man, aged 31, a surgeon, was admitted on Dec. 18th, at 11, A.M., with all the ordinary signs of a dislocation of the hip into the sciatic notch. The dislocation had occurred thirteen hours previously, and happened thus:—The patient was leaving a railway carriage while the train was still moving, when he stumbled and fell down between the moving train and the side of the platform. He fell on his left side, with his head towards the engine. His left thigh was flexed, and his right extended. He thus got jammed between the carriage and the platform, with his left knee against the carriage and his back against the platform. His back remaining fixed against the platform, and his left thigh being forcibly flexed by the moving carriages, and the space between the carriage and the platform being insufficient, the head of the bone was forced out of the socket when the thigh reached flexion to about a right angle with the body. He saved himself from falling on the rails by clinging to the footboard of the carriage.

Reduction was easily effected. The patient, lying on his back, was placed on a mattress on the floor. He was then fully anæsthetized. Bigelow's directions for the reduction of this dislocation were then followed out exactly. Mr. Godlee, the house surgeon, standing on the left side of the patient, first flexed the limb to a right angle with the body. He then placed his foot upon the pelvis to steady it, and made moderately forcible traction from the flexed knee. The bone went in at once with a loud snap. The whole operation did not last a minute. The force used was by no means great. The limb was then put on a long splint, and the patient put to bed.

This form of dislocation is the one which Bigelow would call "dorsal below the tendon." Speaking of it, he says: "The bone first escapes below the socket, or on its thyroid aspect, the limb being flexed. The limb being subsequently extended, the head slips upwards, not only behind the acetabulum, but also behind the capsule and the internal obturator muscle." The head of the bone is first *below*, and subsequently behind, the tendon of the obturator internus. Hence Bigelow's name for the dislocation. In this situation of the head of the bone, the fibres of the internal obturator lie obliquely in front of it, *a tendinous wall interposed between it and the acetabulum, which no extension or rotation short of its rupture can displace or overcome*; but "when the thigh is raised perpendicularly to the floor (the patient lying on his back on the floor), the head of the bone is unlocked, and lies *below* the socket, and needs only to be jerked upwards into its place, or the suspended pelvis may be depressed."

In Bigelow's excellent work on the Hip

* Photographic Review of Medicine and Surgery. Edited by F. F. Maury, M.D., and L. A. Duhring, M.D. Philadelphia.

will be found some first-rate wood-cuts, which will effectually clear up any ambiguity there may be in the above description.—*Lancet*, January 6.

---

Compliment to Dr. H. J. Bigelow.—Mr. Jonathan Hutchinson, Senior Surgeon to the London Hospital, in a lecture on *Dislocation of the Hip-joint (British Medical Journal*, Dec. 23d, 1871), pays the following well-merited compliment to our countryman, Dr. Bigelow:—

"Next, gentlemen, let me say that I regard the researches of Dr. Bigelow in respect to our subject as amongst the most valuable of recent additions to the science of surgery. His essay on the *Mechanism of Dislocation and Fracture of the Hip* I recommend to you most strongly as an excellent example of experimental investigation applied to a subject concerning which but too many had been contented to guess and speculate. I will endeavor to state to you briefly some of the chief results of the Boston professor's work—for details, of course, I must refer you to his work."—*Medical News and Library.*

---

Urethral Rheumatism.—Mr. Thos. Bond read a paper on the so-called urethral rheumatism. He does not regard it as the effect of any specific poison or constitutional diathesis; and it often occurred quite independently of gonorrhœa, as well as of very gouty or rheumatic predisposition. It was dependent on a local condition of the urethra; and he called it urethral rheumatism, as being the most convenient name. It occurred in men of an anæmic or weakly condition, or when gonorrhœa had been treated too long by copaiba or purgatives. There was a subacute inflammation of the synovial membranes and of the fibrous tissues about the ankles, heels, and balls of the great toes; it gradually affected the shoulders, elbows, and hands. Congestion of the sclerotic was present; and the health suffered severely. Exacerbation took place, with pains in the loins in the morning, followed by profuse perspiration, with loss of appetite and sleep. The urine was scanty, the tongue coated, the face hectic. The limbs often became permanently contracted, unless great skill and care were used in the treatment. The urethral discharge varied from profuse muco-purulent discharge to the slightest gleety fluid. The disease was not diathetic, but septæmic; in fact, a chronic pyæmia. He believed the altered state of the blood was kept up by the daily absorption of the morbid material from the urethra. As soon as the supply of the *materies morbi* from the absorption was stopped, the blood gradually eliminated the poison and returned to its healthy state. The peculiar immunity of women was owing to the greater thickness and coarseness of the vaginal epithelium than that of the male urethra, and to their not being treated by specifics and antiphlogistics. If the disease were a rheumatic urethritis, and not an urethral rheumatism, why should not women be equally liable with men? Antiphlogistics, copaiba, and iodide of potassium did no good, but rather harm. The proper treatment was full diet, with steel and quinine, wine and porter, and lastly injection, until the discharge was completely cured. A very good injection was tannin and opium with water.—*Transactions of the Medical Society of London.*

---

Conception under unusual Circumstances.—Dr. Olshausen narrates two cases of conception, in which the women wore intra-uterine pessaries at the time. In one case the menses ceased suddenly, while in the other they continued regularly for six months during which the pessary was worn. The possible dates of cohabitation were precisely given. About twenty days after this, the author removed the instrument. After barely two hundred and fifty-three days, occurred the birth of a very vigorous boy, judging from whose development the entire period of gestation (in this case two hundred and eighty days) must be allowed. The woman had also, during the first months of pregnancy, while the pessary still remained, nausea and vomiting, and therefore regarded herself as pregnant. In the other case, two hundred and forty-nine days after removal of the pessary, followed the birth of a very vigorous girl, which was much too well developed for such a short period of gestation. Dr. Olshausen believes, nevertheless, that continuity of the sexual canal, as a rule, is an absolute condition for conception, but asks, How could conception occur under such exceptional conditions? The hypothesis of Dr. Kristeller may be quoted in reply. This observer has for a long time turned his attention to the slimy mucus produced by the glands of the uterine mucous membrane, especially those of the cervix, and describes minutely its production, conditions of existence, and nature. In the normal sexual conditions, it hangs from one to six centimetres from the orifice of the uterus, clear, tough, and sticky. The author therefore rejects the

contact of the os uteri and penis during sexual intercourse from physico-mechanical grounds, and asserts that the ejaculated sperm collects somewhat in a mass, in a species of recess of the vagina, behind the perineal groove. In this vessel of sperm the already produced or freshly generated stringy mucus bathes, and carries the spermatozoa into the uterus. In fact, Dr. Kristeller, several hours after coitus, found the stringy mucus permeated far up with living spermatozoa. He therefore concludes that conception is effected by means of the string of mucus, and presents as further proof a series of clinical observations.—*Arch. für Gynœkol.*

---

The Physiological Action of Conium.—By Verigo.—The author sums up the results of his experiments in regard to this agent in the following conclusions :—

1. Conium acts especially and most powerfully on the spinal cord, while it chiefly affects the nerves of motion.

2. This action is shown in frogs by symptoms of paralysis without any signs of cramp, independently of the size of the dose; in mammalia, however, after large (fatal) doses there is almost constantly severe cramp, but after small doses, which are not fatal, there appears only the paralysis in the extremities.

3. The paralysis advanced from the cord toward the periphery of the sensory nerves (?), which is affected later.

4. The brain is to all appearances little affected by conium.

5. The sensory nerves are not at all affected by it.

6. In small doses, conium diminishes the respiration; in large doses, it may entirely abolish it, which does not depend upon the affection of the peripheral nerves, as Kölliker thinks, but upon paralysis of the cord.

7. Among mammalia the appearance of cramps is an almost sure sign that death is imminent; they are a symptom of poisoning, and do not depend upon the cessation of respiration.

8. The blood seemingly undergoes no change, at least the corpuscles do not lose their ability to absorb oxygen.

9. Conium does not affect the heart and pulse.

10. It diminishes the temperature of the body, and the more considerably as the paralysis advances. Its influence over the pupil is not constant.

11. Conium has a more powerful and more rapid action when injected into a vein, weaker when taken by mouth or under the skin. In both the latter methods its action is equal.

12. It has no influence on the quantity or composition of the urine.

13. Applied externally, it produces only a slight itching.

14. After poisoning with conium, no constant characteristic appearances are found.—*All. Med. Cent. Zeitung.*

---

Ratio of Height to Weight of the Human Body.—From a number of careful observations made in recent years by Dr. Lankester with regard to the statistics of the human frame, an attempt has been made to determine, approximately, the average ratio in perfect health between a given height of the body and its weight. As the result of these observations, it is laid down that for a height of five feet the normal weight is one hundred and fifteen pounds, and that an additional inch in height should be accompanied by an increase of about five pounds in weight. According to this rule, the weight of a person five and a half feet in height should be one hundred and forty-five pounds, and a person six feet in height should weigh one hundred and seventy-five pounds. Any variation in weight from the ratio given depends, as a general rule, on excess or deficiency of the adipose tissue, which, in a healthy human body weighing one hundred and fifty-four pounds, and five feet eight inches in height, should amount to twelve pounds.—*Australian Medical Gazette.*

---

Homer on Physic.—Doctress Thetis.—Anæsthesia has been traced as far back as the exsection of the rib in the garden; and now comes a writer in the *N. Y. Medical Journal* claiming for Homer a knowledge of the art of embalming. When Patrocles, the friend of Achilles, was slain, according to the Iliad, the body was washed and anointed with ointment nine years old, and laid on a bed and covered with fine linen from head to foot; and over all was spread a white mantle. The next day Thetis came and made a *post-mortem* injection into the body in order to preserve it, "and then she instilled into it through the nostrils ambrosia and ruby nectar, that his body might be uncorrupted." Thetis would appear to have been the first female physician.—*Pacific Med. and Surg. Journal.*

# Medical Miscellany.

CENSORS OF THE SUFFOLK DISTRICT MEDICAL SOCIETY.—The attention of physicians desiring to enter the Massachusetts Medical Society is called to the advertisement of the Censors in our advertising columns.

MASSACHUSETTS GENERAL HOSPITAL. APPOINTMENT OF HOUSE STUDENTS FOR 1872–73.—At a recent meeting of the Trustees of this Institution, Messrs. Frederic C. Shattuck and William H. Workman were appointed house officers in the medical department, and George K. Sabine, James B. Ayer, Frank E. Porter and E. H. Bradford, in the surgical department.

DR. JOHN ROSE CORMACK, the correspondent of the *British Medical Journal* during the Franco-Prussian War, and formerly its editor, is about to receive the honor of Knighthood for his devotion to the cause of the wounded during the sieges. His services have already secured for him the thanks of the French and English Governments, and the Cross of the Legion of Honor.

CHICAGO JOURNALS.—The *Chicago Medical Examiner* comes to us in a new form. It will, in future, be issued on the 1st and 15th of each month, in royal octavo, and will, as before, contain communications of general professional interest.

The *Chicago Medical Journal* has made its appearance for the first time since the great fire, the October, November and December numbers coming out together.

BRAITHWAITE.—Those of our subscribers who live in Massachusetts will, within a few days, receive their copies of *Braithwaite's Retrospect of Medicine and Surgery* for January, 1872. It is, as usual, filled with good material, and will come as a welcome visitor to the table of many a practitioner.

THE *Medical and Surgical Reporter* mentions the death by confluent smallpox of a lady who had an attack of the same disease fifteen years ago.

THE REPARATIVE EFFORTS OF NATURE AFTER GASTROTOMY.—The *Union Medical* exhumes from a medical periodical of 1761, an account of an autopsy made on the body of a famous glutton, a tripe seller, on whom it had been necessary, twenty years before, to practise gastrotomy and remove eight inches of the cæcum and colon, which were gangrened. When on the autopsy the intestine had been tied and inflated, it was discovered that Nature, so fertile and admirable in its methods, had substituted for the intestine which had been cut away, a prolongation of the peritoneum, and that structure served instead of an intestinal canal.—*Med. Press and Circular.*

ARTIFICIAL MILK USED IN PARIS DURING ITS SIEGE.—When natural milk became scarce in Paris, Dubrunfaut proposed an artificial milk made by dissolving 1½ ounces of sugar in a quart of water, adding an ounce of dry albumen (from white of egg) and 15 to 30 grains of soda crystals, and then emulsionizing therein from 1½ to 2 ounces of olive-oil. As the war progressed, gelatin was substituted for the albumen, and then slaughter-house fats—purified by melting at 150° and then projecting into them small quantities of water—for the olive-oil. One firm made in this latter way 123,000 gallons of milk daily for Paris consumption.—*The College Courant.*

THE number of patients admitted into the New York State Inebriate Asylum during the last year, was 244; whole number treated, 315; number at end of year, 85.

---

TO CORRESPONDENTS.—Communications accepted:—Is Phthisis Contagious?

---

BOOKS RECEIVED.—Electricity in its Relations to Practical Medicine. By Dr. Moritz Meyer. Second Revised and Corrected American Edition. By Wm. A. Hammond, M.D., Professor of Diseases of the Mind and Nervous System in Bellevue Hospital Medical College. New York: D. Appleton & Co. 1872. Pp. 506. (From James Campbell.)

PAMPHLETS RECEIVED.—Fifth Annual Report of the Board of Trustees and Officers of the Minnesota Hospital for the Insane, for the year ending Nov. 30, 1871. Pp. 48.—Annual Report of the Superintendent and Physician of the New York State Inebriate Asylum, Binghamton, N. Y., for the Year 1871. Pp. 46.

---

*Deaths in sixteen Cities and Towns of Massachusetts for the week ending Feb. 3, 1872.*

| *Cities and Towns.* | *No. of Deaths.* |
|---|---|
| Boston | 121 |
| Charlestown | 17 |
| Worcester | 22 |
| Lowell | 17 |
| Milford | 3 |
| Cambridge | 17 |
| Salem | 10 |
| Springfield | 9 |
| Lynn | 12 |
| Gloucester | 4 |
| Fitchburg | 7 |
| Taunton | 3 |
| Newburyport | 9 |
| Somerville | 8 |
| Fall River | 8 |
| Haverhill | 6 |
| | 273 |

| *Prevalent Diseases.* | |
|---|---|
| Consumption | 49 |
| Pneumonia | 28 |
| Scarlet fever | 22 |
| Croup and Diphtheria | 12 |

There were four deaths from smallpox: three in Boston and one in Springfield. Of the deaths from scarlet fever, seven were in Worcester and six in Boston.

GEORGE DERBY, M.D.,
*Secretary of State Board of Health.*

---

DEATHS IN BOSTON for the week ending Saturday, Feb. 3d, 121. Males, 58; females, 63. Accident, 5—abscess, 1—apoplexy, 3—aneurism, 1—anæmia, 1—bronchitis, 4—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 5—cyanosis, 2—cancer, 2—burned, 1—consumption, 25—convulsions, 1—croup, 2—debility, 1—dropsy, 1—dropsy of the brain, 4—diphtheria, 2—scarlet fever, 6—typhoid fever, 3—gangrene, 1—gastritis, 1—disease of heart, 7—intussusception, 1—disease of the kidneys, 4—congestion of the lungs, 1—inflammation of the lungs, 8—marasmus, 2—old age, 3—paralysis, 1—peritonitis, 2—puerperal disease, 1—purpura hæmorrhagica, 1—rheumatism, 1—smallpox, 3—disease of spine, 2—suicide, 1—whooping cough, 1—unknown, 4.

Under 5 years of age, 40—between 5 and 20 years, 7—between 20 and 40 years, 34—between 40 and 60 years, 27—above 60 years 13. Born in the United States, 81—Ireland, 27—other places, 13.